ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract Element Code: PDMAL020E0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Abutilon reventum* S. Watson

COMMON NAME: Yellowflower Indian Mallow, Yellow-flower Indian-mallow, Yellow

Indian Mallow

SYNONYMS:

FAMILY: Malvaceae

AUTHOR, PLACE OF PUBLICATION: S. Watson, 1886, Proc. Amer. Acad. Arts 21:418.

TYPE LOCALITY: Hacienda, San Jose, 25 miles south of Batopilas, Chihuahua, Mexico.

TYPE SPECIMEN: HT: GH 52648. Edw. Palmer #56, Aug 1885, flower and fruit. LT: MO.

TAXONOMIC UNIQUENESS: In the United States, species *reventum* is 1 of 27 in the genus *Abutilon*. There are 49 genera in the family Malvaceae.

DESCRIPTION: Tall, perennial herb with a woody base, to about 1.8 m (6 ft) tall; stems to 2.5 m (3.3 ft (ARIZ 243742)). Petioles 5-15 cm (2.0-6.0 in) long, leaf blades heart-shaped, 6-25 cm (2.4-10 in) long, palmately veined, tapering abruptly to the tip, with shallow, rounded teeth on the margins. Hairs present on the leaves with a few equal branches (stellate); hairs absent on the stems and leaf stalks. Flowers are bright yellow, with petals 10-12 mm long; many anthers are present, clustered at the filament tube apex. Fruit consists of 7-8 carpels, each 10-12 mm long with 3-4 seeds; style branches are as many as the carpels.

AIDS TO IDENTIFICATION: This is the only *Abutilon* in Arizona with bright yellow flowers rather than orange. Leaves and the general appearance are similar to *Abutilon* sonorae and *Anoda abutiloides* but floral and fruit characters differ. In addition, the absence of long hairs on the stems seems to be the only important character separating this from *A. sonorae*. *Abutilon reventum* is much less common within the Sonoran Desert than *A. sonorae*. *A. reventum* occurs mainly in the scrub formations just above the true desert.

ILLUSTRATIONS:

Colored Photo of specimen (US 15207, Palmer, E. 56, *in* http://botany.si.edu/types/fullrecords.cfm?myfamily=)

TOTAL RANGE: Southern Arizona south to Chihuahua, Oaxaca, Queretaro and Zacatecas, Mexico.

RANGE WITHIN ARIZONA: Occurs along the Geronimo Trail in Cochise County; Pinaleno Mountains in Graham County; also in the Baboquivari, Coyote, Rincon, and Santa Catalina mountains of Pima County; and in Santa Cruz County they can be found in Sycamore Canyon in the Pajarito Mountains, Tumacacori Mountains, and in the Foothills near Nogales.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial shrub subshrub.

PHENOLOGY: April to September.

BIOLOGY:

HABITAT: Found on slopes and along streams in canyons. NatureServe (2008) reports that from southern Arizona to southern Mexico (Oaxaca) *A. reventum* occurs in arroyos and disturbed areas; and in southern Sonora, Mexico it occurs from 250-1000 m (820-3279 ft) in the tropical deciduous forest zone. Collected in Arizona on steep gneiss cliffs, rocky slopes, and on fine alluvial deposits along small washes (ARIZ, in SEINet 2008).

ELEVATION: 3,600 - 6,000 ft. (1097-1829 m). NatureServe (2008) reports elevation from 3,000 - 4,000 ft (915-1220 m).

EXPOSURE: SE- and SW-facing slopes, and N-facing canyon (on W side of cliffs ASU 231928).

SUBSTRATE: Kearney and Peebles (1951), reports that in Arizona this species occurs in rich soil near streams. Collected on gneiss slopes to cliffs (ARIZ, in SEINet 2008).

PLANT COMMUNITY: In the Sonoran Desert usually near the upper limits of the Lower Sonoran Zone (Shreve and Wiggins 1964, *in* NatureServe 2008); paloverde-saguaro desertscrub and desert grassland/pinyon-juniper woodland (ARIZ and ASU, SEINet 2008). Associated species include: *Acacia constricta* (whitethorn acacia), *Acacia greggii* (catclaw acacia), *Agave* sp., *Anisacanthus thurberi* (Thurber's desert honeysuckle), *Baccharis sarothroides* (desertbloom), *Carnegia gigantea* (Saguaro), *Celtis reticulate* (= *C. laevagata* var. *reticulata*, netleaf hackberry), *Coursetia glandulosa* rosary babybonnets), *Larrea tridentata* (creosote bush), *Lysiloma watsoni* (littleleaf false tamarind), *Mimosa biuncifera* (= *M. acaleaticarpa* var. *biuncifera*, catclaw mimosa), *Parkinsonia* (palo verde), *Pinus monophylla* (singleleaf pinyon), *Platanus* (Sycamore), *Prosopis juliflora* (mesquite), *Prosopis* sp. (mesquite), *Quercus arizonica* (Arizona white oak), and *Yucca* sp. (SEINet, 2008).

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None STATE STATUS: None OTHER STATUS: None

MANAGEMENT FACTORS: In Arizona threats include grazing.

CONSERVATION MEASURES TAKEN:

SUGGESTED PROJECTS: Surveys needed to determine the distribution, life history, ecology and grazing impacts.

LAND MANAGEMENT/OWNERSHIP: NPS – Saguaro National Park; USFS – Coronado National Forest; Sabino Canyon Recreation Area.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

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Missouri Botanical Garden – TROPICOS, Nomenclatural Data Base. *Abutilon reventum* S. Watson. http://www.tropicos.org/Name/19601234. Accessed: 25 Jun 2008.

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USDA, NRCS. 2008. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

AGFD Plant Abstract -4- Abutilon reventum

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

C. Jenkins - University of Arizona Herbarium, Tucson.

ADDITIONAL INFORMATION:

Revised: 1992-12-03 (DBI)

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